

REMARKS

Reconsideration of the application is respectfully requested in view of the above amendment and the comments that follow. Entry of the foregoing amendment is requested in order to place this application in condition for allowance or in better form for consideration on appeal.

The Examiner has misconstrued Applicants' amendments and arguments in the response to the previous Office Action mailed May 14, 2003. In Applicants' previous responses filed November 12, 2003 and December 4, 2003, Applicants cancelled claim 4 due to the incorporation of the subject matter thereof into claims 1 and 11, and also cancelled claim 8 due to the incorporation of the subject matter thereof into claim 1.

The Examiner made two rejections in the previous Office Action. One rejection was of claims 1, 2, 4, 5 and 9 under 35 USC 102(b) as being anticipated by Quigley U.S. Patent No. 5,324,248. Claim 8 was not included in this rejection. This rejection was a stand alone rejection. Accordingly, Applicants amended independent claim 1 to include the subject matter of non-rejected claim 8 and thereby this rejection under 35 USC 102(b) should have been removed.

The other rejection was of claims 1, 3, 6-8 and 10-16 under 35 USC 103(a) as being unpatentable over Quigley U.S. Patent 5,324,248 in view of Hatch U.S. Patent 5,840,386 and further in view of Fujita U.S. Patent 5,296,582. Claim 4 was not included in this rejection. Like the above rejection, this rejection was also a stand alone rejection. Accordingly, Applicants amended independent claims 1 and 11 to include the subject matter of non-rejected claim 4 and thereby this rejection under 35 USC 103(a) should have been removed.

In view of the specific rejections of specific claims made by the Examiner and the amendments made by Applicants, it is submitted that the rejections were effectively removed by the amendments and that the instant final rejections are at the very least premature.

The final rejection of claims 1, 2, 5 and 9 under 35 U.S.C. 102(b) as being anticipated by Quigley (US 5,324,248) is respectfully traversed.

Quigley discloses a machine roll that has a sleeve structured with an outer layer that is hard, wear resistant and machinable, and with an inner body layer of fiber-reinforced polymer. The sleeve can have one or more interface layers, preferably of a composite, disposed in one instance between the outer and body layers and disposed in another instance within the body layer. As noted by the Examiner in the Office Action, the outer layer of composite material contains ceramic particulate matter such as silicon carbide (see column 6, lines 52-68 of Quigley). Nowhere does Quigley disclose or suggest a fiber reinforced composite material having a first polymeric layer free of any particulates, a second polymeric layer having metal particulates, and a thermally sprayed material coating the second polymeric material, as claimed by Applicants.

The metal particulates in the second polymeric layer enable a successful thermal spray coating because of the heat capacity and ductility of the metal particulates. The second polymeric layer can then be grit blasted to obtain roughness which improves adhesion of the thermal spray coating.

In view of the amendment of claims 1, 5 and 11 and the above arguments, this final rejection is deemed improper and should be withdrawn.

The final rejection of claims 1, 3, 6, 7 and 10-16 under 35 U.S.C. 103(a) as being unpatentable over Quigley (US 5,324,248) in view of Hatch et al. (US 5,840,386) and further in view of Fujita et al. (US 5,296,582) is respectfully traversed.

The primary reference, Quigley is discussed above. As noted by the Examiner in the Office Action, the outer layer of composite material contains ceramic particulate matter such as silicon carbide (see column 6, lines 52-68 of Quigley). Nowhere does Quigley disclose or suggest a fiber reinforced composite material having a first polymeric layer free of any particulates, a second polymeric

layer having metal particulates, and a thermally sprayed material coating the second polymeric material, as claimed by Applicants or the beneficial effects resulting therefrom.

The secondary references, Hatch et al. and Fujita et al., add nothing to make up for the deficiencies of Quigley as a primary reference. As with Quigley, nowhere does Hatch et al. or Fujita et al. disclose or suggest a fiber reinforced composite material having a first polymeric layer free of any particulates, a second polymeric layer having metal particulates, and a thermally sprayed material coating the second polymeric material, as claimed by Applicants or the beneficial effects resulting therefrom.

Applicants submit that alleged obviousness of the instantly claimed invention must be predicated on something more than it would have been obvious to try adding a metal particulate (instead of a ceramic particulate) to the second polymeric layer of a fiber reinforced composite as claimed by Applicants or the possibility that such a metal particulate would have been considered in the future, having been neglected in the past. See Ex parte Argabright et al. 161 USPQ 703. It is submitted that "obvious to try" is not a valid test of patentability, and patentability determinations based on that as a test are contrary to statute. See In re Mercier 515 F2d 1161, 185 USPQ 774; In re Antonie 559 F2d 618, 195 USPQ 6; In re Goodwin et al. 576 F2d 375, 198 USPQ 1; and In re Tomlinson et al. 363 F2d 928, 150 USPQ 623.

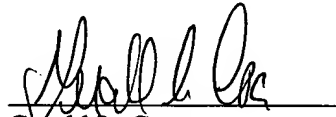
Clearly, it is only by hindsight that the Examiner could impute a metal particulate to the outer layer of Quigley to arrive at the instantly claimed fiber reinforced composite material, and such hindsight obviousness after the invention has been made is not the proper test. See In re Carroll 601 F2d 1184, 202 USPQ 571.

In view of the amendment of claims 1, 5 and 11 and the above arguments, this final rejection is deemed improper and should be withdrawn.

It is respectfully submitted that the final rejections of record are improper and that the application is in condition for allowance. Accordingly, reconsideration and allowance of all claims are courteously solicited.

A response to the Office Action mailed January 30, 2004 was due April 30, 2004. Accordingly, submitted herewith is a petition for an extension of time for three (3) months. Please charge fees/surcharge which may be required by this paper, or credit any overpayment, to Deposit Account No. 16-2440.

Respectfully submitted,

A handwritten signature in dark ink, appearing to read "Gerald L. Coon", is written over a horizontal line.

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